

REMARKS

Claims 1-6 are pending in this application. By this Amendment, claims 1 and 2 are amended and claim 7 is canceled. Reconsideration of the application is respectfully requested.

The Office Action rejects claims 1-3 and 5 under 35 U.S.C. §102(b) over U.S. Patent No. 5,557,490 to Jabbari. This rejection is respectfully traversed.

The Office Action asserts that Jabbari discloses all elements recited in claims 1-3 and 5. Applicants respectfully submit that Jabbari does not disclose or suggest that each inner ring of a pair of ball bearings is fixed directly to a fixed shaft and the pair of ball bearings is fitted directly into an axial bore of the actuator block, as recited in claims 1 and 2.

Jabbari discloses an actuator arm 104 with a pivot bore 110, where a steel sleeve 112 is attached on the inner wall of the pivot bore 110. See Figs. 2 and 4A and col. 2, lines 54-61. A shaft assembly 114 is fitted into the pivot bore 110 with the outer races 124 of the bearing sets 118 fixedly attached to the steel sleeve 112. See Figs. 2 and 3 and col. 2, line 62 - col. 3, line 2. Thus, Jabbari discloses interposing the steel sleeve 112 between the bearing sets 118 and the pivot bore 110. Nowhere does Jabbari disclose or suggest fitting the bearing sets 118 directly into the pivot bore 110. Therefore, Jabbari does not disclose or suggest that each inner ring of the pair of ball bearings is fixed directly to the fixed shaft and the pair of ball bearings is fitted directly into an axial bore of the actuator block, as recited in claims 1 and 2.

For at least the above reasons, Jabbari does not disclose each and every element recited in claims 1 and 2. Therefore, Jabbari does not disclose or suggest the subject matter recited in claims 1 and 2, and claims 3 and 5 depending therefrom. Withdrawal of the rejection of claims 1-3 and 5 under 35 U.S.C. §102(b) is respectfully requested.

The Office Action rejects claims 4, 6 and 7 under 35 U.S.C. §103(a) over Jabbari and further in view of U.S. Patent No. 4,984,115 to Takahashi et al. This rejection is moot with respect to the canceled claim 7, and is respectfully traversed with respect to claims 4 and 6.

The Office Action admits that Jabbari does not disclose or suggest that each pair of ball bearings has an extension formed on one side of an outer ring thereof, and the pair of ball bearings is mounted onto the fixed shaft with the extensions abutted against each other. However, the Office Action asserts that Takahashi discloses these features. Applicants respectfully submit that Jabbari and Takahashi, individually or in combination, do not disclose or suggest that each inner ring of a pair of ball bearings is fixed directly to a fixed shaft and the pair of ball bearings is fitted directly into an axial bore of the actuator block, as recited in claims 1 and 2.

Takahashi discloses a bearing structure in which a sleeve 18 is axially slidably fitted on the shaft 7. See Fig. 1 and col. 2, lines 49-67. The inner rings 15b and 16b are bonded to the sleeve 18. Thus, Takahashi discloses interposing the sleeve 18 between the shaft 7 and the inner rings 15b and 16b. Nowhere does Takahashi disclose or suggest bonding inner rings 15b and 16b directly to the shaft 7. Therefore, Takahashi does not disclose or suggest that each inner ring of the pair of ball bearings is fixed directly to the fixed shaft and the pair of ball bearings is fitted directly into an axial bore of the actuator block, as recited in claims 1 and 2. Thus, Takahashi does not supply the subject matter lacking in Jabbari.

Furthermore, Jabbari and Takahashi, if combined, would require a sleeve interposed between the bearing sets and the actuator, because Jabbari specifically requires such a sleeve for improvement. See col. 2, lines 9-24 of Jabbari. At the same time, the combination would require a sleeve interposed between the inner ring and the shaft, because Takahashi specifically discloses that the sleeve 18 is fitted with the inner rings 15b and 16b so that these inner rings are appreciably movable along the sleeve 18. See col. 3, lines 20-38 of

Takahashi. Thus, the combination does not disclose or suggest a direct fitting between the inner rings and the shaft or a direct fitting between the bearing sets and the actuator.

Accordingly, the combination of Jabbari and Takahashi does not disclose or suggest that each inner ring of the pair of ball bearings is fixed directly to the fixed shaft and the pair of ball bearings is fitted directly into an axial bore of the actuator block, as recited in claims 1 and 2.

For at least the above reasons, Jabbari and Takahashi, individually or in combination, do not disclose or suggest the subject matter recited in claims 1 and 2, and claims 4 and 6 depending therefrom. Withdrawal of the rejection of claims 4, 6 and 7 under 35 U.S.C. §103(a) is respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-6 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachment:

Petition for Extension of Time

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